

a' [0038] Since power supply 210 is generally configured to output a constant current during the deplating/metal layer removal process, the increase in circuit voltage resulting from metal layer 501 being removed from the area below nozzle 223 may be measured and/or monitored by controller 230. Therefore, when the circuit voltage increases above a predetermined threshold, where the threshold is calculated to represent the point where metal layer 501 is removed from the area below nozzle 223, controller 230 may be configured to adjust the radial position of arm 224 so that nozzle 223 is over an area of metal layer 501 that has not been removed yet. For example, Figure 7 illustrates substrate 500 during the metal removal process. Initially, nozzle 223 will be positioned above substrate center 601, and therefore, the metal layer 501 in region 700 proximate center 601 will be removed. Once metal layer 501 in central region 700 is removed, the voltage in the circuit will increase. Controller 230 monitors the increased voltage and actuates stepping motor 231 in response thereto, which adjusts the radial position of arm 224 so that nozzle 223 is over annular region 701 where metal layer 501 has not yet been removed. The metal removal process continues until the voltage in the circuit again increases past the predetermined threshold indicating that the metal layer 501 in annular region 701 has been removed. When the voltage increases past the threshold, controller 231 again adjusts the radial position of arm 224 to position nozzle 223 over annular region 702 where the metal layer 501 has not yet been removed. This process continues successively through numerous annular regions of substrate 500 until nozzle 223 reaches the perimeter 703 of substrate 500. Therefore, generally, as the metal layer removal process continues, the radial position of arm 122 may be adjusted outward from center 601 by controller 230 in order to facilitate removal of the remaining metal layer 501 from the outer portion 604 of substrate 500, as illustrated in Figure 6. The direction of radial or pivotal movement of arm 224 is shown by arrow 605, and generally includes a radial or pivotal movement of arm 224 that causes nozzle 223 to be moved away from the center 601 of substrate 500.